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July 1981 DR 1192

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METEOROLOGICAL DATA REPORT

19315B MLRS

Missile Number V-13-001

Round Number V-162/AT2-1

6 July 1981

by

Program Support Coordinator Phone Number (505) 679-9568 AVN Number 349-9568

> DTIC AUG 1 2 1981

THE STADING

ATMOSPHERIC SCIENCES LABORATORY WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM

UNITED STATES ARMY ELECTRONICS COMMAND

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Meteorological data gathered for the	launching of the	he 19315R MIRS Missile No
V-13-001, Round No. V-162/AT2-1 prese	nted in tabula	r form.
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INTRODUCTION

19315B MLRS, Missile Number V-13-001, Round Number V-162/AT2-1, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 1300 MDT, 6 July 1981. The scheduled launch time was 1300 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained in the following methods:

1. Observations:

- a. Surface
- (]) Standard surface observations to include pressure, temperature (C), relative humidity, dew point (C), density (gm/m^3) , wind direction and speed, and cloud cover were made at the LC-33 Met Site T-0 minutes.
- (2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.
 - b. Upper Air:
- (1) Low level wind data were obtained from RAPTS T-9 pibal observations at:

SITE AND ALTITUDE

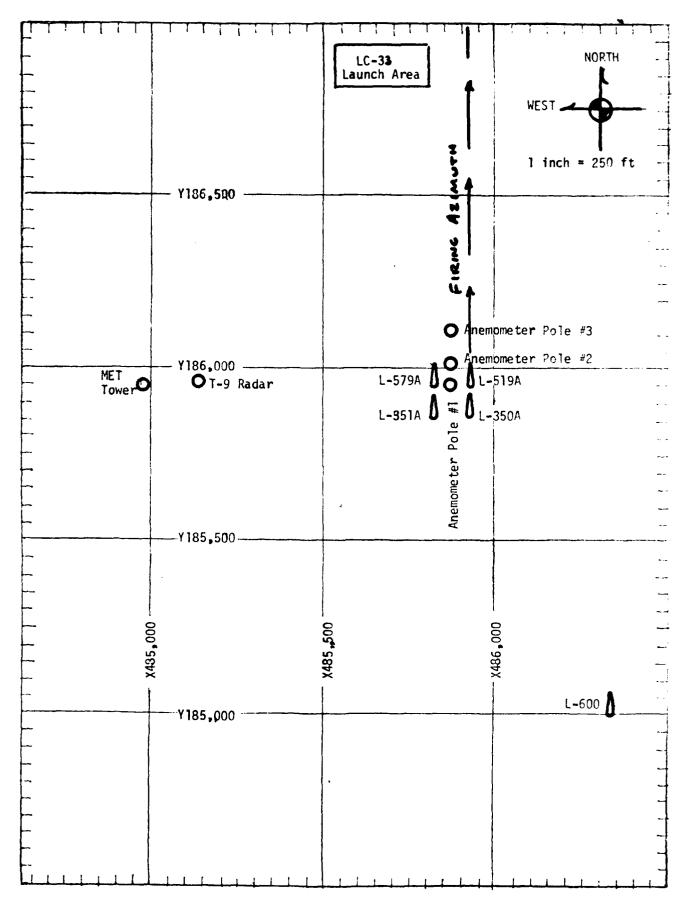
LC-33 2 KM NICK 2 KM

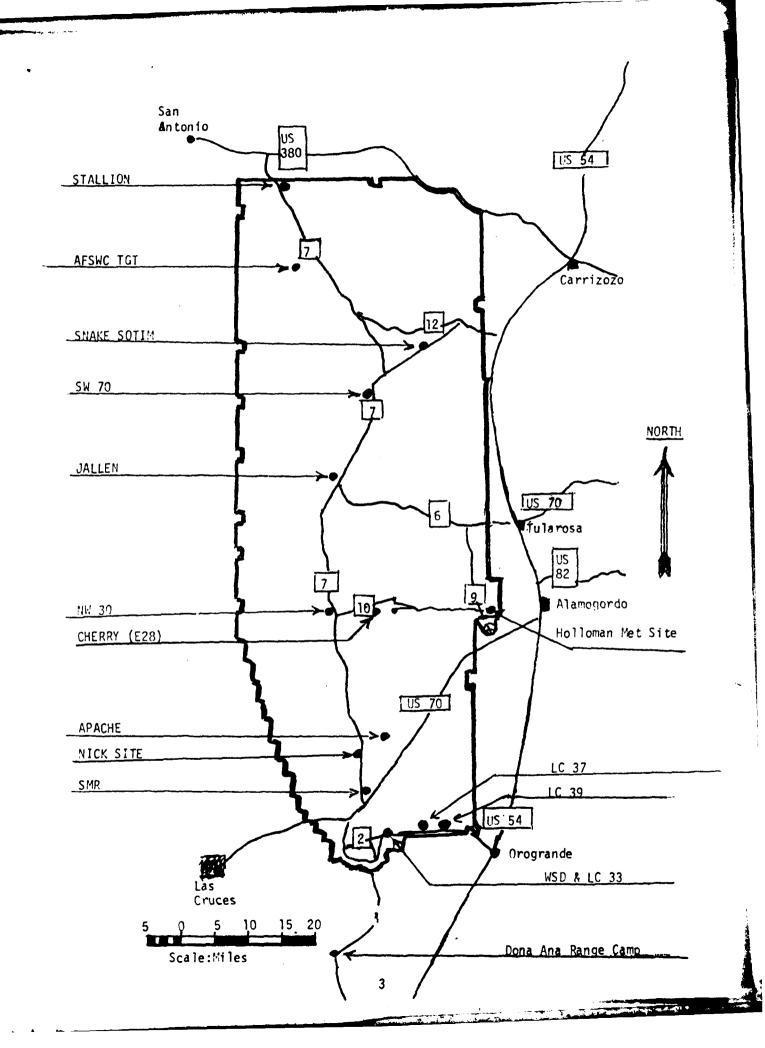
(2) Air structure data (rawinsonde) were collected at the following Met Sites:

SITE AND TIME

SMR 1130 MDT WSD 1215 MDT

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Accession For	
NTIS GRA&I	ł
DTIC TAB	1
Unannounced	1
Justification	1
	1
By	1
Distribution/	1
Availability Codes	4
Annil and/or	}
Dist intent	1
	1
X	





PROJECT SURFACE OBSERVATION

1 10 4 4							1				
Walt 1	1							STATION LC-33	-33		
DATE 06	DATE 06 July 1981	198	<u></u>					x= 484,982.6	, , ,	X= 484,982.64 Y= 185,957,73 H=3983.0	3983.0
TIME M D T	PRESSURE mbs	TEMPERATURE DEW POINT OF OC	ATURE OC	DEW PC	INT OC	RELATIVE HUMIDITY %	DENSITY gm/m3	DIRECTION degs Tn	WIND SPEED Kts	DIRECTION SPEED CHARACTER VISIBIL- degs In kts kts ITY	VISIBIL- ITY
1300	878.9		32.9		9.6	9.6 24 ·	994	A 2	\ \ -		9
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		DEMADYS	NE INCh					
			HGT					
	CI OHOS	d I AYF	AMT TYPE HGT					
		35	AMT					_
		~	HGT		13000			
	CLOUDS	d LAYE	TYPE		J Y			-
		2nc	AMT	,	1			_
		<u>د</u>	HGT	o o	7007	-		•
		t LAYE!	AMT TYPE HGT		3			_
		JS	AMT	<	,			_
		OBSTRUCTIONS	O VISIBILITY					_

TABLE 2

T-TIME PILOT-BALLOON MEASURED WIND DATA DATE 06 July 1981

SITE: LC-33

TIME: 1300 MDT

WSTM COORDINATES:

X = 485,135.76

Y = 185,919.24

H= 3,988.57

SITE: NICK

TIME: 1300 MDT

WSTM COORDINATES:

X = 470,734.56

Y = 255,775.64

H=4,126.57

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS	LAYER MIDPOINT	DIRECTION	SPEED
			METERS AGL	DEGREES	KNOTS
SURFACE	C A	L M	SURFACE	110	01
150	212	03	150	156	03
210	220	03	210		
270	178	03		165	03
			270	184	02
330	173	03	330	209	02
390	200	06	390		
500	156	04	500	135 055	01 05
650	039	04	650	047	07
800	004	03	800	3 52	02
950	918	06	950	310	03
1150	029	05	1150	204	
1350	341	07		294	03
			1350	315	03
1550	360	05	1550	325	03
1750	002	04	1750		
2000		U 4		333	03
2000	349	04	2000	333	03

Data obtained from T-9 radar Tracked Pilot-Balloon Observation.

Data obtained from Single Theodolite Tracked Pilot-Balloon Observation.

AIMING COMPUTER MET MESSAGES 06 July 1981

SMR 1130 MDT METCM1325064 061750122879 00160002 30730879 01475001 30530870 02118002 30270845 03427001 29860808 04484004 29360763 05556007 28960719 06056008 28560678 07054909 28120638 08019013 27740601 09059023 27370565 10076026 27050530	METCM1324 061830122 00311003 01305004 02320002 03365001 04264001 05001003 06075007 07034009 08020014	30830879 30620869 30340845 29910808 29370763 28980720 28570678 28120639 27689601 27243565
	09057022 10075025 11051018 12066016	27240565 26930530 26730499 26190452

Ŋ	S JULY 81 T IND HRS MDT ASCENSION NO. 75
S	6 JULY 81 130 HRS MIT
	STATION ALTITUDE 3997.30 FEET MSL
SIGHL	

The second second

FICANT LEVEL DATA
1870050075
S M R

GEODETIC COORDINATES 32.48034 LAT DEG 106.42307 LON DEG

PRESSURE	_	TEMPE	TEMPERATURE	REL.HUM.
	AL TI	AIR	DEMPOINT	PERCENT
MILLIBARS	MSL FEET	DEGNEES	CENTIGRADE	
<u>.</u>	3997.3	32.8	10.8	
*	8.4604	31.3	11.1	29.0
••	4991.3	28.5	2.6	30.0
.2	8567.3	17.5	3,0	45.0
•	10499.6	13.5	3.5	50.0
*	13705.9	5.1	-2.2	59.0
€.	14628.9		۲,	84.0
÷	_	٠,	14.1	73.0
0.	16419.1	-1.1	9.4.	77.0
7.4		-2.5	-12.5	46.0
537.0	17609.3	-2.7	-20.4	24.0
0:0		-5.7	-22.1	26.0
0:		•	-33.7	25.0
363.0	27438.3	-22.6	-37.5	24.0
3.0	29264.4		-40.5	24.0
••	31958.7	-32.4	-40.0	24.0
267.0	34635.8	•	-50.6	24.0

-22.1 -33.7 -37.5 -40.5 -46.0

19460.1 25574.8 29264.4 39264.4 34635.8 34635.8 39173.4 41030.5 47058.0 49421.2 552876.7 552876.7 58567.2 58567.2 68175.8 81176.7 82940.4

2500.0 23500.0 23500.0 23500.0 22500.0 22500.0 22500.0 23000 23000 25000 25000 25000 25000

7

#PERATURE REL.HUM, DENSITY SPEED OF MIND DATA DEWPOINT PERCENT GMCVGUIC SOUND FOREESTINN KNO LOCATION SPEED OF LOCATION	STATION ALTITUDE 3997 6 JULY B1	197.30 FEET MSL 130 HRS MENT	IT MSL M.BMT		1870060075 S M R	75		GF 00E TIC 32.48	COOKDIN/
NT PERCENT GM/CUBIC SOUND DIMECTION SF ADE METER KNOFS LEGREES(TN) KR ADE METER KNOFS LEGREES(TN) KR B 26.1 995.7 LB3.3 90.0 B 26.1 995.4 LB3.3 90.0 B 26.4 67.4 67.6 10.6 B 26.4 67.4 67.6 224.0 B 40.5 65.9 241.2 265.6 B 40.5 65.9 264.4 67.6 B 40.5 65.9 264.8 264.8 B 40.5 65.9 264.8 264.8 B 40.5 65.9 <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>106.</th><th>106.42307 LON DEG</th></t<>								106.	106.42307 LON DEG
PERCENT GM/CUBIC SOUND DIRECTION SF 26.0 995.6 683.3 90.0 25.0 90.0 25.0 90.0 25.0 90.0 25.0 90.0 25.0 90.0 25.0 90.0 25.0 90.0 25.0 90.0 25.0 90.0 25.0 90.0 25.0 90.0 25.0 90.0	TEMP	~	EHATURE	REL.HUM.		SPEED OF	AINU OA	TA	INDEX
10.8 26.0 995.6 683.3 90.0 10.3 29.5 995.7 683.3 90.0 9.2 30.0 976.3 676.4 106.9 9.2 30.0 976.3 678.4 106.9 8.5 34.2 964.4 676.6 106.9 9.0 36.3 941.0 673.1 224.0 10.0 36.3 941.0 673.1 224.0 10.0 36.3 941.0 673.1 224.0 10.0 36.4 959.6 671.3 224.0 10.0 40.5 974.4 665.9 207.0 10.0 40.5 665.9 207.0 207.0 10.0 44.7 665.9 207.0 207.0 10.0 467.1 664.0 207.0 207.0 10.0 467.1 664.0 206.0 207.0 10.0 467.1 667.0 207.0 207.0 10.0 467.1 6	AIR MILLIUARS DEGREES C	ن	DEWPOINT Entigrade	PERCENT	Ü	SOUND	DIRECTION DEGREES(TN)	SPEEU KNOTS	OF REFRACTION
10.8 26.1 995.7 083.3 90.0 10.3 29.5 987.7 080.2 100.6 8.5 34.2 964.4 106.9 106.9 8.6 34.2 962.6 674.9 224.0 8.0 36.3 964.4 106.9 224.0 8.0 36.3 964.4 675.1 224.0 8.0 38.4 929.6 671.3 224.0 8.0 42.6 907.4 665.9 224.0 8.0 42.6 907.4 665.9 224.0 9.0 44.4 665.9 270.0 224.0 9.0 44.4 665.9 270.0 224.0 9.0 44.4 665.9 270.0 224.0 9.0 460.1 665.9 270.0 224.0 9.0 460.1 665.9 270.0 224.0 9.0 460.1 660.0 260.0 270.0 9.0 460.1 660.0	32.8		10.8	26.0		683.3	0.06	1.9	1.000274
10.3 29.5 987.7 080.2 95.6 9.2 30.0 976.3 078.4 100.9 8.9 34.2 964.4 674.9 224.0 8.0 36.3 941.0 673.1 241.2 7.5 38.4 929.6 671.3 224.0 6.9 40.5 941.0 673.1 224.0 6.9 40.5 941.0 673.1 224.0 6.9 40.5 97.4 665.9 224.0 6.9 40.5 965.9 264.4 265.9 6.0 40.7 666.9 200.0 200.0 7.0 40.1 664.6 294.6 200.0 8.0 40.1 667.1 660.0 200.0 8.0 40.1 660.0 20.0 20.0 10.0 70.2 660.0 20.0 20.0 10.0 70.2 60.0 20.0 20.0 10.0 70.2 60.0 20.0 20.0 10.0 70.2 70.0 70.0 20.0 <td>32.8</td> <td></td> <td>10.8</td> <td>26.1</td> <td>995.7</td> <td>_</td> <td>0.06</td> <td>1.9</td> <td>1.000274</td>	32.8		10.8	26.1	995.7	_	0.06	1.9	1.000274
9.2 30.0 976.3 b78.4 110.6 8.9 32.1 952.4 b76.6 b74.9 576.6 b74.9 524.0 58.9 34.2 952.4 b76.6 b74.9 524.0 5.0 36.3 b74.9 b76.6 b74.9 524.0 5.0 40.5 916.4 b69.5 5.0 40.5 916.4 b69.5 5.0 44.7 89.5 665.9 584.4 47.4 871.4 661.0 359.4 570.0 48.7 550.0 871.2 665.9 584.4 307.0 871.4 b61.0 359.4 570.5 570.0	30.0		10.3	29.5	987.7	_	95.8	1.3	•
8.9 32.1 954.4 576.6 156.9 8.5.1 524.0 8.5.3 34.2 952.6 674.9 224.0 241.2 7.5 38.4 929.6 671.3 226.7 6.2 40.5 916.4 667.7 279.5 66.2 42.6 974.4 667.7 279.5 66.2 42.6 974.4 667.7 279.5 66.2 44.4 47.4 884.1 664.6 52.9 284.4 47.4 871.6 663.4 330.1 20.6 55.9 847.1 661.0 359.4 20.6 14.1 884.1 661.0 359.4 20.6 14.1 885.7 659.4 20.6 27.3 27.3 27.3 27.3 27.3 27.3 27.3 27.3	28.5		9.5	30.0	_	678.4	110.8	8.	1.000266
8.5 34.2 992.6 674.9 224.0 8.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	26.9		8.9	32.1	_	676.6	166.9	⇒ 1	
7.5 38.4 929.6 671.3 256.7 6.9 40.5 907.4 667.7 279.5 6.9 40.5 907.4 667.7 279.5 6.9 40.5 907.4 667.7 279.5 6.0 40.5 907.4 667.7 279.5 7.0 40.7 87.1 667.9 284.4 8.0 40.7 87.0 20.6 20.6 8.1 87.0 87.1 667.8 20.6 9.2 80.0 87.0 20.6 20.6 9.2 80.0 87.0 20.6 20.6 9.2 80.0 87.0 20.6 20.6 10.0 83.7 20.0 20.6 20.6 11.0 83.7 20.0 20.6 20.6 11.0 83.7 20.0 20.0 20.0 12.0 80.0 20.0 20.0 20.0 12.0 80.0 20.0 20.0 20.0 10.2 80.0 20.0 20.0 20.0	1.02 0.40		n 0	34.2	952.6	6.479	224.0	• •	
6.9 40.5 6.9 40.5 6.9 40.5 6.9 40.5 6.2 42.6 6.8 44.7 6.8 4.1 6.8 4.1 6.8 4.1 6.8 6.2 6.2 6.2 6.3	22.3		7.5	4.86	924.6	671.3	2.162	7 -	1.000252
6.2 42.6 907.4 667.7 279.5 5.0 46.1 4.7 4 884.1 664.6 294.8 44.7 5.0 46.1 884.1 664.6 294.8 330.1 3.9 48.7 859.3 665.9 284.4 5.0 148.7 859.3 665.9 284.4 20.6 20.6 20.6 20.6 20.6 20.6 20.6 20.6	20.8		6.9	40.5	910.4	5-699	267.8	1.7	
5.5 44.7 890.5 665.9 284.4 5.0 46.1 884.1 664.6 294.8 3.9 48.7 859.3 662.2 330.1 3.3 50.0 847.1 661.0 359.6 2.5 51.4 824.5 652.4 24.3 -1.6 52.8 824.5 652.4 24.3 -1.1 55.6 802.5 054.7 27.9 -1.2 57.0 791.7 653.1 27.9 -1.3 67.0 791.7 653.1 27.9 -1.4 80.5 770.3 050.0 27.3 -1.5 67.0 770.3 050.0 27.3 -1.5 67.0 770.3 050.0 27.3 -1.6 80.5 770.3 050.0 27.3 -1.7 80.5 770.3 050.0 27.3 -1.8 60.5 770.3 050.0 27.3 -1.9 81.1 73.8 643.3 30.3 -1.0 80.5 770.3 050.0 27.3 -1.0 80.5 770.3 050.0 27.3 -1.0 80.5 770.3 050.0 27.3 -1.0 80.5 770.3 050.0 27.3 -1.0 80.5 770.3 050.0 27.3 -1.0 80.5 770.3 050.0 27.3 -1.0 80.5 770.3 050.0 27.3 -1.0 80.5 770.3 050.0 27.3 -1.0 80.5 770.3 050.0 27.3 -1.0 80.5 770.3 050.0 27.3 -1.0 80.5 770.3 050.0 27.3 -1.0 80.5 770.3 050.0 27.3 -1.0 80.5 770.3 050.0 27.3 -1.0 80.5 770.3 050.0 27.3 -1.0 80.5 770.3 050.0 27.3 -1.0 80.5 770.3 050.0 27.3 -1.0 80.5 770.3 050.0 27.3 -1.0 80.5 770.3 050.0 27.3 -1.0 80.5 770.3 070.3 -1.0 80.	19.2		6.2	45.6	907.4	66.1.7	279.5	3.0	
5.0 46.1 884.1 664.6 294.8 4.4 47.4 871.6 663.4 307.0 359.4 25.5 51.4 859.3 662.2 350.1 359.6 294.8 55.8 84.5 659.4 24.3 26.5 51.4 835.7 659.4 24.3 26.8 84.5 659.4 24.3 26.8 85.0 84.5 659.4 26.8 24.5 659.4 26.8 27.9 27.9 27.0 20.8 27.0 770.3 650.0 27.0 27.0 770.3 650.0 27.0 770.3 650.0 27.0 770.3 650.0 27.0 770.3 650.0 27.0 770.3 650.0 27.0 770.3 650.0 27.0 770.3 650.0 27.0 770.3 650.0 27.0 770.3 650.0 27.0 770.3 670.0 27.0 770.3 670.0 27.0 670.0 27.0 670.0 27.0 670.0 27.0 670.0 67	17.7		5.5	44.7	890.5	6.699	584.4	5.5	1.000240
4.4 47.4 871.6 663.4 307.0 3.9 48.7 859.3 662.2 330.1 3.3 50.0 847.1 661.0 359.6 2.5 51.4 835.7 659.4 24.3 1.6 52.8 862.7 869.4 24.3 1.6 52.8 862.7 653.1 1.0 57.0 791.7 653.1 27.9 1.1 80.5 770.3 650.0 27.9 1.2 80.5 772.7 640.7 27.9 1.3 67.0 776.3 650.0 27.9 1.4 77.2 775.4 645.1 30.3 10.2 54.1 705.2 642.0 39.8 10.2 55.0 660.6 638.3 360.3 22.2 26.0 667.0 637.3 38.0 23.2 25.0 660.0 637.3 38.0 24.4 6682.4 640.2 441.4 25.5 660.6 638.3 642.0 26.3 75.6 660.1 652.4 640.5 27.7 25.7 640.1 659.9 40.8 28.2 25.0 660.0 637.3 38.0 28.2 25.0 660.0 638.3 360.0 28.3 25.7 670.4 655.1 520.0 28.4 25.5 660.0 638.3 64.9 28.4 25.5 660.0 638.3 67.0	16•6		2•0	46.1	884.1		8.46S	6.9	1.000236
3.9 48.7 859.3 062.2 330.1 3.3 50.0 847.1 661.0 359.6 2.5 51.4 835.7 659.4 20.6 3.6 62.8 824.5 657.8 26.8 4.5 52.8 802.5 054.7 27.3 4.0 57.0 70.3 050.0 27.3 4.0 77.2 77.2 77.2 040.2 22.7 4.0 73.2 77.2 77.2 040.2 22.7 4.0 73.2 77.2 77.2 040.2 22.7 4.0 73.2 77.2 77.2 640.1 42.1 20.3 10.2 59.9 660.6 030.3 39.0 640.0 52.7 22.2 25.0 650.0 057.3 30.0 34.0 52.7 22.2 25.0 650.0 057.3 30.0 34.0 52.7 22.3 25.7 640.0 057.3 30.0 30.0 52.7 22.4 77.5 75.5 650.0 057.3 30.0 50.0 52.7 22.5 25.0 650.0 057.3 30.0 50.0 52.0 52.0 52.0 52.0 52.0 52.0 5	15•6		†• †	47.4	871.6		307.0	7.2	1.000232
3.3 50.0 847.1 661.0 359.6 2.5 51.4 835.7 659.4 20.6 52.8 824.5 657.8 26.8 26.8 55.6 50.5 55.6 802.5 656.3 20.5 27.3 27.0 70.2 650.1 20.5 27.3 27.0 70.2 650.1 20.4 20.6 20.6 20.6 20.6 20.6 20.6 20.6 20.6	14.5		3.9	48.7	854.3		330 • 1	6.2	1.000228
2.5 51.4 635.7 659.4 20.0 65.8 52.8 684.5 657.8 26.8 62.5 655.6 55.6 65.3 26.6 65.9 55.1 55.6 55.6 55.0 70.2 650.1 55.0 57.0 70.2 650.1 55.0 57.0 70.3 650.0 27.3 67.0 70.3 650.0 27.3 67.0 70.3 650.0 27.3 67.0 70.3 650.0 27.3 67.0 70.3 650.0 27.3 67.0 70.2 67.0 70.2 67.0 70.2 67.0 67.0 67.0 67.0 67.0 67.0 67.0 67.0	13.5		۳. ۳.	50.0	847.1		359.8	9.5	1.000224
1.0 55.8 615.4 556.8 24.5 55.6 6.8 25.6 6.8 25.6 6.8 25.6 6.8 25.6 6.8 25.6 6.8 25.6 6.8 25.6 6.8 25.6 6.8 25.6 6.8 25.0 770.3 0.50.0 27.3 27.9 27.0 27.0 27.0 27.0 27.0 27.0 27.0 27.0	12.2		ر د ،	51.4	835.7		9.03 70.5	7.5	1.000220
-1. 55.6	10.9		9	22.0	874.5		9 = 40 4 = 40	V 0	1.000216
-1.0 57.0 791.7 653.1 27.9 -1.0 58.4 77.2 791.7 653.1 27.9 -1.3 67.0 770.3 650.0 27.5 -1.3 67.0 770.3 650.0 27.5 -1.3 67.0 770.3 650.0 27.5 -1.3 67.0 770.3 650.0 27.5 -1.0 80.5 77.2 750.4 648.6 10.4 12.8 77.2 750.7 640.7 640.7 642.0 39.8 17.8 29.9 682.4 640.2 642.0 39.8 17.8 29.9 682.4 640.2 641.1 42.1 22.2 25.0 650.0 651.1 659.2 25.0 650.0 651.1 659.2 25.0 650.0 651.1 659.2 25.0 650.0 651.1 659.2 25.0 650.0 651.1 659.5 25.0 650.0 651.1 659.5 25.0 650.0 651.1 659.5 25.0 650.0 651.1 659.5 25.0 650.0 651.1 659.5 25.0 650.0 651.1 659.5 25.0 650.0 65	8 • • •		-	55.6	802.5		27.3	8	
-1.9 58.4 781.1 651.6 29.5 -1.3 67.0 770.3 650.0 27.5 -1.1 80.5 759.4 648.6 10.4 -2.4 77.2 759.4 648.6 10.4 -2.4 77.2 759.4 648.6 10.4 -2.4 77.2 750.4 648.1 12.8 -2.4 77.2 750.4 640.3 52.7 -2.4 77.2 750.4 640.3 50.0 -2.3 73.8 640.4 640.3 50.0 -2.5 640.6 63.4 640.3 50.0 -2.6 671.4 659.2 60.3 50.0 -2.7 25.0 660.6 630.3 50.0 -2.7 660.6 630.3 50.0 60.3 -2.7 660.6 630.3 50.0 60.3 -2.5 660.6 630.3 50.0 60.3 -2.5 660.6 630.3	6•9		-1.0	57.0	791.7	_	27.9	8.8	
-1.3 67.0 770.3 050.0 27.5 -1.3 67.0 759.4 048.6 10.4 -1.9 81.1 748.1 047.4 12.8 12.8 -2.4 77.2 730.7 040.2 27.5 22.7 735.7 040.2 27.5 22.7 725.4 048.5 10.4 12.8 10.2 54.1 705.2 042.0 39.0 17.8 29.9 682.4 040.2 39.0 17.8 29.9 682.4 040.2 25.0 660.6 638.3 42.1 22.2 25.0 660.6 638.3 30.0 34.0 25.2 25.0 660.0 653.2 25.0 660.0 653.2 25.0 660.0 653.2 25.0 25.0 650.0 653.2 25.0 25.0 650.0 653.2 25.0 25.0 650.0 653.2 25.0 25.0 650.0 653.2 25.0 25.0 650.0 653.2 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25	5•6		-1.9	58.4	781.1		568	0.6	
	t•3		-1.3	67.0	770.3	0.039	27.3		1.000199
9 81.1 748.1 547.4 12.8 12.8 1.9 77.2 735.7 540.2 52.7 73.8 73.8 735.4 645.1 50.0 50.0 17.8 645.1 50.0 50.0 17.8 645.1 50.0 50.0 17.8 645.1 50.0 50.0 17.8 59.9 682.4 640.2 59.9 662.4 640.2 55.0 660.6 638.3 64.8 671.4 653.2 55.0 660.6 638.3 54.8 54.8 55.5 66.0 658.3 54.8 54.8 55.5 55.6 658.4 655.4 655.4 55.6 55.8 650.4 650.4 650.4 55.1 55.6 56.3 57.6 57.8 57.8 57.8 57.8 57.8 57.8 57.8 57.8	2•9			80.5	759.4	-	10.4	10.4	1.000199
25.3 73.8 725.4 645.1 50.0 50.0 50.0 50.0 50.0 50.0 50.0 5	0.5		5 -	81.1	73. 7		12.8		1.000195
-5.3 73.8 715.8 643.3 30.3 10.2 54.1 705.2 642.0 39.8 17.8 29.9 693.7 641.1 42.3 20.8 24.4 662.4 640.2 42.1 21.2 25.0 671.4 659.2 40.3 21.7 25.5 660.6 638.3 40.3 22.2 26.0 650.4 650.4 60.3 23.2 25.7 670.4 650.4 64.4 25.5 670.4 650.4 64.4 64.4 25.5 670.4 650.4 64.4 64.4 25.5 670.4 65.1 64.4 64.4 25.5 67.5 67.5 64.4 64.4 25.4 67.5 67.5 64.4 64.4 25.4 67.5 67.7 67.7 25.4 67.4 67.4 67.4 25.4 67.5 67.7 67.7 25.4	• 2		0.4-	73.2	725.4		30.0	20.9	1.000185
10.2 54.1 705.2 642.0 39.8 17.8 29.9 693.7 641.1 42.3 682.4 640.2 42.1 21.2 25.0 671.4 659.2 40.5 40.5 21.2 25.0 671.4 659.2 40.5 40.5 21.7 25.5 66.0 658.3 50.0 657.3 50.0 52.2 25.0 660.0 652.4 50.0 55.2 25.0 660.0 650.0 650.4 550.4 550.4 650.4 650.4 650.4 650.4 650.4 650.7 50.0 50.0 50.0 50.0 50.0 50.0 50.0			-5.3	73.8	715.8		30.3	24.1	1.000181
17.8 29.9 693.7 641.1 42.3 20.8 24.4 662.4 640.2 42.1 21.2 25.0 671.4 659.2 40.4 21.7 25.5 660.6 638.3 40.4 22.2 26.0 670.0 637.3 59.0 23.2 25.7 670.0 634.3 51.0 25.3 25.7 670.4 65.0 64.4 26.3 25.5 601.7 52.0 29.4 25.7 57.5 57.5 29.4 25.7 50.5 50.5			-10.2	54.1	705.2		34.6	25.7	1.000172
20.8 24.4 682.4 640.2 42.1 21.2 25.0 671.4 059.2 41.4 21.7 25.5 660.6 638.3 40.5 22.2 25.0 650.0 657.3 38.0 23.2 25.0 640.0 650.4 54.0 24.2 25.1 670.1 650.4 51.0 25.3 25.7 670.4 650.1 634.9 27.1 25.5 610.4 651.7 52.0 27.1 25.5 610.4 651.7 52.0 27.1 25.5 601.5 670.3 54.9 27.1 25.5 670.5 670.5 670.5			-17.8	59.9	693.7		42.3	26.5	1.000162
21.2 25.0 671.4 059.2 41.4 21.7 25.5 660.6 636.3 40.5 22.2 26.0 650.0 657.3 58.6 23.2 25.9 640.0 650.9 51.0 25.3 25.7 670.4 650.1 24.2 26.3 25.7 670.4 650.1 24.9 27.1 25.5 601.5 670.5 54.9 27.1 25.5 601.5 670.5 57.5		•	-20.8	J	682.4		42.1	54.9	1.000158
22.2 25.5 660.6 638.3 40.5 22.2 26.0 658.0 657.3 58.0 23.2 25.0 660.0 657.3 58.0 24.2 25.3 65.1 650.4 65.1 25.3 25.7 620.4 65.1 24.0 26.3 25.7 670.4 65.1 24.0 27.0 25.5 601.5 670.5 54.0 27.0 25.5 601.5 670.5 54.0		,	21.2	25.0	671.4		त • र त	22.9	1.000155
22.2 26.0 650.0 637.3 38.0 23.2 25.9 640.0 650.9 34.0 34.0 34.0 34.0 34.0 34.0 34.0 34.0		•	-21.7	25.5	9.099		₹0•₹	20.5	1.000153
23.2 25.9 640.0 0.55.9 54.8 1 24.2 25.8 0.50.1 0.54.5 51.0 1 25.3 25.7 6.0.4 0.55.1 649.9 1 26.3 25.6 0.01.7 52.0 1 27.5 25.5 0.01.5 0.04.9 1 28.4 25.5 5.0 0.05.4 57.5 1		•	-22.2	9	0.050		38•11	17.7	1.000150
24.2 25.8 620.1 634.5 51.6 14 25.5 25.7 620.4 655.1 79.2 14 26.3 75.6 610.9 631.7 57.6 14 27.5 25.5 601.5 670.5 24.9 15 28.4 25.5 992.3 670.4 77.5		,	-23.2	Ω.	640.0		Е#5	15.4	1.000148
25.5 25.7 620.4 65.1 74.4 14 26.3 75.6 610.4 531.7 57.6 14 27.5 25.5 601.5 670.5 54.9 15 28.4 25.5 99.5 600.4 57.5	-8.1		-24.5	ட	0.50.1		11.15	14.2	1.000145
26.3 25.6 610.9 51.7 52.6 14 27.5 25.5 601.5 570.5 54.9 15 28.4 25.5 592.3 55.4 57.5 15 29.4 25.9 58.5 57.5 15	-9.5		-25.3	25.7	4.029		7.00	14.1	1.000142
27	-10.4		-26.3	25.6	610.9		32.6	•	1.000140
28+4 - 25+5 - 572+3 - 570+4 - 57+5 - 15+ 29+4 - 25+4 - 583+3 - 57+5 - 50+5 - 16+	-11.5			ر در در در در در در در در در در در در در	001.1		か。 (大)	15.5	1.000138
1 0000000000000000000000000000000000000	-15.1		128.4	. ° . ° . ° . ° . ° . ° . ° . ° . ° . °	5.50				1.000135
	-13.8		# 6.2 L	# . 0.2	995.5	(+ / . ' .	n. •	T • · 1	1.000155

RDINA LAT	106.42307 LON DEG	INUEX	5	REFRACTION	1.000131	1.000128	1.000126	1.000124	1.000122	1.000120	1.000118	.00011	1.000114	1.000112	1.000110	1.000108	1.000106	1.000104	1.000102	1.000101	1.000099	1.000097	1 • 000095		1.000092				C90000.	C#0000 - 1	1.000081	1.000079	1.000078	1.000076	1.000075	1.000074	1.000072	1.00001	1.000070	1.000068	1.000067	1.000066	F000001
Gr ODE T	106.	TA	SuEEU	KNOTS	•	17.4	18.3	20.4	23.2	28.3	33.9	38.4	42.9	45.8	48.8	20.6	52.2	52.5	51.7	50.7	49.1	47.3	6.44	45.4	41.5	40.7	1	9.95 9.05	4 d	20.04	46.7	46.5	46.2	46.2	46.2	0.84	43.1	•	41.0	3.03 7	# · ^ ·	38.5	٠
		"IND DATA	DIRECTION	DEGREES (TN)	43.8	45.7	45.7	43.9	41.8	37.7	34.6	52.1	30.5	59.4	28∙8	28.8	28.9	79.0	29.5	29.5	29•0	29.1	30.1	31.2	59.6	28°5	25.9	755.	1967	1.01	15.5	15.4	15.3	16.5	17.7	18.5	18.9	19.2	19.2	19.1	/ 87	7.5	* · · · · ·
JATA 75		SPEED OF	SOUND	KNOTS	626.1	624.7			_	_	618.7	617.6	616.6	615.4	614.3	613.1	611.8	610.3			_	_	_		_					5-466		_	-	588.2		-	584•5	583.4	582.3	580.9	-		3/6.8
PPER AIR UAT 1870060075 S M R	TABLE 5		GM/CUBIC	METER	574.4	565.6	557.0	548.5	539.3	530.1	521.1	512.2	503.5	495.0	486.6	478.4	4.074	462.B	455.2	447.9	440.6	433.4	425.B	418.3	411.0	40.3.B	396.7	389.6	382.5	2,076	362.2	355.7	340.4	343.2	337.1	330.8	324.5	318.4	312.3	300.4	300 th	294.9	5002
-	-	REL.HUM.	PERCENT		25.3	25.2	25.1	25.0	24.8	24.6	5. 4.2	24.2	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	0.4	•		•													
T MSL M DT		TEMPERATURE	DEWPOINT	CENTIGRADE	-30.4	-31.4	-32.5	-33.5	4+46-	-35.2	-36.0	-36.8	-37.6	-38.4	-39.2	-40.1	-41·0	-45.0	-43.0	1.44-	-45.1	-46.1	-47.0	-47.8	-48.7	-49.5	20•	r . (200														
97.30 FEET MSL 1 130 HRS M DT		TEMP	AIR	DEGREES	-15.0	-16.1	-17.3	-18.4	-19.3	-50.5	-21.0	-21.9	-22.7	-23.6	-24.6	-25.5	-26•6	-27.7	-28.9	-30.1	-31+3	-32.5	-33.5	-34.4	-35.4	-36.4	-37.3	-38.2	139.1		-42.0	-43-1	-44.1	-45.2	-46.2	-47.2	0.84-	-48.9	L+6+-	-50.8	-51.8	152.9	153.4
39	NO. 75	PRESSURE	•	MILLIBARS	425.8	417.5	409.2	401.2	395.1	385.1	377.3	369.6	362.1	354.6	347.3	240.1	335.0	326.0	319.2	312.5	305.9	299.5	293.0	286.7	280.5	274.5	268.6	262.1	0.762	9.107	240.3	234.9	229.7	224.6	519.6	214.6	209.7	204.9	200.3	195.6	191.0	၁ (1951
STATION ALTITUDE	ASCENSION NO.	GEOMETRIC		MSL FEET		24000.0	•	•	•	26000.0	•		•	•	28500.0	•	29500.0	30000.0	•	31000.0	31500.0	32000.0	32500.0	33000.0	33500.0	34000.0	34500.0	35000.0	35500-0	36500.0	37000.0	37500.0	38000.0	38500.0	39000.0	39500.0	0.0 000+	•	•	41500.0	45000.0	250	42000.0

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTER-OLATION.

STATION ALTITUDE 6 JULY 81 ASCENSION NO.	. v. v.	997.30 FEET MSL 1130 HRS MDT		UPPER AIR DATA 1670060075 S M R	DATA 75		6E00ET1 52.	6E0UETIC COOKDINATES 32.48034 LAT DEG
			•	TABLE 5				5
GEOMETRIC ALTITUDE	PRESSURE	TEMPERATURE	REL.HUM. PFRCFNI	DENSITY	SPEED OF	WIND DATA	TA	INDEX
MSL FEET	MILLIBARS	DEGREES C		METER	KNOTS	DEGREES (TN)	KNOTS	REFRACTION
43500.0	177.8	-55.0		283.9	575.4	16.6	34.5	1.000063
0.000+4	173.6	-56.1		278.5		15.9	33.2	1.000062
44500.0	169.5	-57.1		273.3		15.3	32.1	1.000061
45000.0	165.5	58.5		268.1	571.2	15.0	31.2	1.000060
45500.0	167.9	159.2		265.1		15.0	30.4	1.000059
46500.0	154.0	2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		2.80.2	568.4	10.0	29.5	1.000058
47000.0	150.4	4.62.4		248.6		14.7	2.00	1.000055
47500.0	146.7	-63.3		243.6		13.3	23.7	1.000054
48000.0	143.1	-64.1		238.6		10.7	21.3	1.000053
48200.0	139.6	-65.0		233.7	562.1	9.1	19.2	1.000052
0.00064		-65.9		228.9	560.9	14.3	18.2	1.000051
49500.0		9.99-		224.1	556.6	50.0	17.4	1.000050
2000000		166.6		218.5	526.9	28.5	16.5	1.000049
50500.0		-66.5		213.1		38.2	15.9	1.000047
51000.0	123.3	-66.5		207.8		1.7.7	15.1	1.000046
52000.0		160.5		202.6		y 0 0 0	12.0	1.000045
0.0000	70/17	C.00-		9.767		ייע ר	٠ ا ا	1.000044
5.000.0	111.5	#• QQ		192.7	560.1	7,6.6	5. 7	1.000043
350000	108.7	9.00		184.1	0000 0000 0000	7.00	0 m	1.000042
54000.0	106.0	-68•1		180.1	550.9	9.30	2.4	1.00041
54500.0		6.89-		170.3		57.1	5.6	1.000039
55000.0	_	-69-7		172.0		5.00	6.7	1.000038
55500.0		7-69-		168.0		6.89	0.6	1.000037
26000.0	9266	/-89-		165.3		101.1	12.0	1.000036
56500.0		168.0		158.6		105.9	13.7	1.000035
57500.0		-67.1		150.0	0000	100.00	0 e	1.000034
58000.0		-67.6		146.8	15.00 to	1.07.7	16.4	1.000033
58500.0	84.5	-68.0		145.5		104.5	17.0	
59000.0	82.4	-67.3		3.39.4		101.9	17.7	
٠	h•08	-66.3		1.55.3		100.0	18.3	1.000030
•	70.	-65-55		131.5		3 • 8 · ·	19.0	1.000029
•	2	-65.2		128.1	561.8	103.1	18.1	1.000029
61000.0	74.6	-65.0		124.8	562.1	108•3	17.4	1.000028
•	/ 4.7/	7.49.		121.6	562.5	6.21	18.0	1.000027
•	0.17	* * * * * * * * * * * * * * * * * * *		₹ 1. 1.	H + 1947	7.51	20.5	1.000026
0.00029	7 1	1.49.		11,000			200	1.000026
0.0000	•	0.00		112,3	t • 995	4.634	73.5	1.000025

GeODETIC COORDINATES 32.48034 LAT DEG 106.42307 LON DEG	A INDEX Speed of KNOTS REFRACTION		#20000 : " 50000 i	◀ '	25.6 1.000023	٠-	-	-			-	26.0 1.000019	~	23.7 1.000018		1100001	22.5 1.000016	7 -	•	20.4 1.000015	-	-	-	23.0 1.000013	26.8 1.000013		-	-	_	29.6 1.000011	30.6 1.000011	٠,	33.0 1.000010	•	• -	-	37.2 1.000009	- -
6.0	WIND DATA DIRECTION Sof DEGREES(IN) KNO	3			6°/6											1.011									92.1						C+COT							
UATA 075	SPEED OF SOUND KNOTS		00+00 to		7 565.7								-			4 5/4.0		376.0			-	4 580.9			0 581.8		_	7 5H3.0			_		284.5				1 588.6	6+684 0+
UPPER AIR DATA 1870060075 5 M R TABLE 5	GM/CUBIC METER	,	4.601	• • • • • • • • • • • • • • • • • • • •	103.7	94.46	95.B	93.3	6.06	86.5	86.2	83.9	81.7	79.5	. / /	72.4	2.07	1 · 1 · 0 · 0	67.6	65.8	64.1	62.4	6.09	59.4	58.0 56.5	55.53	54.0	52.7	51.4	50.5	0.64	J = 1	46.4	4.11		2.5	41.1	•0 ₇
	REL.HUM. PERCENT																																					
997.30 FEET MSL 1 30 HRS MDT	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	6	2001	1.20	-62.3	-61.4	6.09-	4.09-	0.09-	-59.5	-59-1	-58.6	-58.2	-57.5	2000	150.0	50.00 Res	104.0	-53.0	-52.3	-51.6	-50.8	50•6	-50.3	1,03-1	7.64-	h.6h-	-49.2	0.64-	7-8-7	U + 10 + 11 + 12 + 12 + 13 + 13 + 13 + 13 + 13	7 • 0 ÷ 1	1.84-1	, , , , , , , , , , , , , , , , , , ,	0°2''-	6.51-	8-44-	-43.9
w 15	PRESSURE MILLIBARS DE	7 0 97			62.8	, φ				24.3				N.04			. ~						38.9	,	36.65		. 7.	6.	4	m,			v r	•	2	9	6	ų.
STATION ALTITUDE 6 JULY 81 ASCENSION NO.	GEOMETRIC ALTITUDE MSL FEET 1	0 00 31 7	0.00004			65500•0	6000		67000.0	•	68000.0	•	0.00069	69500 •0	0.0000	71000-0	71500.0	72000.0	72500.0	73000.0	73500.0	74000.0	-	•	7500.0	76500.0	77000.0	77500.0	78000.0	78500.0	79600	-	80000			82000.0	•	רייו

GrODETIC COOKDINATES 32.48034 LAT UEG 1U6.42307 LON DEG	INUEX	REFRACTION	1.000009	1.000008	1.000008	1.000008	1.000008	1.000008	1.000008	1.000007	1.000007	1.000007	1.000007	1.000007	1.000007	1.000006	1.000006	1.000006	1.000006	1.000006	1.000006	1.000006
6£00£T1 32. 106.	TA ShEEU	KNOTS	38.4	38.3	30.2	37.2	36.1	35.1	33.0	30.9	28.9	26.9	25.1	24.5	24.3	24.4	23.4	21.9	20.5			
	WIND DATA	DEGREESTIN	105.5	107.6	109.7	112.4	115.4	118.6	116.6	114.3	111.7	108.4	104.7	101.2	98.5	95.7	†•9 6	6•86	101.7			
JATA 75	SPEED OF SOUND	RNOTS	590.5	590.5	590.B	591.1	591.4	591.7	592.0	592.3	592.6	592.9	593.2	593.5	593.6	593.6	593.7	593.7	593.7	595.A	593.A	593.A
UPPER AIN DATA 1870060075 Smr TABLE 5	DENSITY GM/CUBIC	METEX	39.1	38.2	37.3	30.4	35.6	34.8	34.0	33.2	32.4	31.7	30.9	30.2	29.5	28.9	28.3	27.6	27.0	26.4	25.H	25.3
- F	REL.HUM. PERCENT																					
ET MSL M Di	TEMPERATURE R DEWPOINT	DEGREES CENTIGRADE																				
7.30 FEE . 130 HRS	TEMF AIR	DEGREES	-43.6	-43.4	-43.2	-45.9	-42.7	-42.5	-42.2	-45.0	-41.8	-41.5	-41.3	-41.1	-41.0	-41.0	6.04-	6.04-	6.04-	6.04-	8·0h-	9.04-
STATION ALTITUDE 3997.30 FEET MSL 6 July 81 130 HRS M D ASCENSION NO. 75	PRESSURE	MILLIBARS	25.7	25.2	24.6	24.1	23.5	23.0	22.5	22.0	21.5	21.1	20.6	20.1	19.7	19.3	16.8	18.4	18.0	17.6	17.2	10.9
STATION ALTIT 6 JULY 81 ASCENSION NO.	GEOMETRIC ALTITUDE	Mar FEE!	83500.0	0.000+A	84500.0	82000.0	85500.0	86000.0	86500.0	87000.0	87500·0	88000.0	88500.0	0.0006a	89500.0	0.00006	90500.0	91000.0	91500.0	92000.0	92500.0	93000.0

GEODETIC COOKDINATES 32.48034 LAT DEG 106.42307 LON DEG																													
GEODETIC 32.4 106.4	AIA	SPEED	KNOTS	8.	1.3	5.5	6.2	8.8	11.6	25.7	17.9	15.6	20.8	47.6	47.6	45.9	41.0	33,5	25.7	15.8	7.2	16.4	21.3	26.3	24.4	19.2	33.3	38.2	24.2
	WIND DATA	DIRECTION	DEGREES (TN)	110.3	249.2	285.6	359.5	27.4	14.9	39.7					29.0									91.1	108.2		103.0		
evels 75	HEL. HUM.	PERCENT		30•	37.	45.	50.	56.	84.	55.	26.	20.	25.	24.	24.														
MANDATORY LEVELS 1870060075 S M R TABLE 6	TEMPERATURE	DEWPOINT	CENTIGRADE	9.5	7.8	9•¢	3.3	1	0•	-10.0	-22.1	-27.0	-33.7	-38.9	0.94-														
¥ /i			DEGREES C	28.5	23.2	17.5	13.5	8.2	2.5	-2.1	-5.7	-11.8	-18.6	-24.5	-32.4	2.04-	8.64-	-55.7	-62.5	-66.5	6-69-	-66.2	-64•3	-61.4	-58.0	-51.0	-48.0	-43.3	-41.0
MSL. IDr	RESSURE GEOPOTENTIAL		FEET	4988	6738.	8567.	10489.	12520.	14669.	16963.	19432.	22111.	25032.	28264.	31894.	36042.	40930.	43758.	46929•	50571.	54985.	59388.	62058.	65173.	68913.	73602.	79787.	83773.	88726•
E 3997.30 FEET 1 130 HRS M 75	PRESSURE GE		MILLIBARS	850.0	800.0	150.0	200.0	650.0	0.009	550.0	200.0	450.0	0.004	350.0	300.0	250.0	200.0	175.0	150.0	125.0	100.0	80.0	20.0	0.09	20.0	0.04	30.0	25.0	20.0
STATION ALTITUDE 3997.30 FEET MSL 6 JULY 81 130 HRS MDT ASCENSION NO. 75																		•											

** AT LEAST ONE ASSUMED RELATIVE HUMJDITY VALUE WAS USED IN THE INTERPOLATION.

GEODETIC COORDINATES 32.40043 LAT DEG 106.37033 LON DEG		
ATA	REL.HUM. PERCENT	22.0 52.0 53.0 56.0 56.0 79.0 79.0 87.0 53.0
SIGNIFICANT LEVEL DATA 1870020434 WHITE SANDS	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	9.11 11.55 11.25 3.77 3.77 1.6.61 1.6.56 1.8.56 1.8.56 1.8.56 1.8.56 1.8.56 1.8.56 1.8.56
SIGNIFIC 18 WHI TABLE 7	TEMPE AIR DEGREES	333 333 230 1133 1133 1133 1133 1135 1135 1135 11
MSL	PRESSURE GEOMETRIC ALTITUDE ILLIBARS MSL FEET	3989.0 4654.2 4983.1 8552.5 10503.3 13020.7 14194.3 14194.3 14582.6 16976.1 17367.2 18603.1 19468.2 22426.7
STATION ALTITUDE 3989.00 FEET MSL 6 JULY 81 1215 HRS MDr ASCENSION NO. 434	PRESSURE MILLIBARS	879.2 859.6 850.0 750.0 700.0 611.4 602.6 602.6 550.4 542.2 517.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0

STATION ALTITUDE 6 JULY 81 ASCENSION NO. 43	.TITUDE 39.	3989.00 FEET MSL 1 215 HRS M.DT 34	ET MSL M-OT		UPPER AIR UAT 1870020434 WHITE SANUS TABLE 8	UATA 34 US		GEODETIC 32.40 106.37	ETIC COORDINATES 32.40043 LAT DEG 06.37033 LON DEG
GEOMETRIC	PRESSURE	TEM	TEMPERATURE	REL.HUM.	DENSITY	SPEED OF	"INU DATA	TA.	INDEX
ALTITUDE	104.17	AIR	DEWPOINT	PERCENT	GM/CURIA		DIRECTION	SPEED	OF
MOL FEE!	MILLIBARS	DEGREES	CENTIGRADE		METEK	KNOIS	DEGREES (TN)	KNOTS	REFRACTION
3989.0	879.2	•	9•1	22.0	n.566	684.2	.57	-	30000
0.000t	878.9	33.7	8.5	22.2	992.7	684.2	175.0	2.9	
4200.0	864.1	30.9	11.1	29.7	984.4	681.3	175.1		
2000.0	849.5	29.0	11.2	33.1	973.5	679.2	175.2	•	1.000272
5500.0	834.8	27.5	10.5	34.6	1.196	677.9	175.3	1.8	1.000268
0.0009	820.4	26.0	8•6	36.1	950.1	675.7	174.0	1.5	•
2000.0	2000	500		37.7	938.7	673.9	172.2	1.3	1.000259
7500.0	7.07.	26.7	? ! ?	39.5	927.5	672.1	1/6.9	6,	1.000254
0.000	76.5.2	6.12	C•/	D . C .	916	670.2	196.1	۰٠	1.000250
8500.0	752.0	19.0	0 t	7 a	0.006 0.006	# · p q q	0.45%	٥	-
90000	738.7	17.1	ָה מַ מַּ	0 4 5 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	974.8	0000	7.462	۰	•
9500.0	725.6	16.1	4.7	6.94	870.1	664.6			1.0000.1
100001	712.7	15.0	4.2	48.5	857.9	662.7	8.5	6	
10500.0	700.1	13.9	3.7	50.0	846.0		30.9	5.3	•
11000.0	687.4	12.6	•	51.2	834.6	_	38.7	4.9	•
11500.0	675.0	11.3	1.9	52.4	823.4	S	39.8	6.7	•
12000.0	662.8	0	•	53.6	812.3	656.8	32.8	•	1.000212
12500.0	650.8	8.7	~	54.8	801.4	655.3	26.1	7.5	1.000208
13000.0	639.1	7.5	•	56.0	790.7	Ð	21.0	7.6	
13500-0	\$ 1.79 \$ 1.79	N 0	•	61.4	779.6		16.3	-	1.000202
0.000.00	9.009) v	- ·	69.8 19.4	768.7	-	11.4	12.3	1.000201
5000	50.45	0 M	7,	1.00	6./6/	\$ 6 to 1	1101	13.	1.000199
15500.0	582.0	1.0	-1.7	82.1	737.0	547.0	20.1	16.7	1.000196
16000.0	571.1	H) ·	-2.7	83.7	726.9	644.5	27.8	19.0	1.000187
16500.0	560.4	-1.6	-3.8	85.4	716.8	645.9	33.1	21.4	1.000183
1,000.0	0.000 000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.	-2.9	0.0	85.9	706.9	641.3	36.6	23.9	1.000179
0.00071	1000	0 · · ·	5.6-) · · · · · · · · · · · · · · · · · · ·	696.1	640.1	V-80	25.1	.00017
18500.0	5.00.1	0 0 0	-12.9	44.0	683.7	639.7	10°	20.5	.00016
19000	500.1	3 - 1	0.01.	24.0	6.1.0	0.400	1000	200	•
19500.0	7.007		-19.2	3.0	7.000	630.0		10.0	1.0001
20000.0	489.7	-6.7	-20.3	33.0	639.7	0.36.0	24.8	17.1	•
20500.0	480.3	-8.0	-21.4	33.0	630.4	634.7	20.5	16.3	1.000146
21000.0	471.0	-9.5	-22.5	33.0	621.1	633.2	6+62	ŝ	•
21500.0	461.8	-10.1	-23.5	•	611.1	632.1	56.0	15.7	1.000141
_	•	-10.9	+>4 • 4	1:	1.109	031.1	_	15.0	'n
22500.0	6.5.44 1.14	-11.8	•		591.3	630.0	46.7		1.000136
23000.0	432•T	-13.1	-26.6	31.2	582.5	628.4	47.0	15.9	1.000134

STATION ALTITUDE 3989.00 FEET MSL 6 JULY 81 1215 HRS MDT ASCENSION NO. 434	.TITUDE 39 L NO. 434	89.00 FEE 1215 HRS	ET MSL M Dr		UPPER AIR DATA 1870020434 WHITE SANDS TABLE 8	DATA 134 105		Gr ODE T 1 32. 106.	Grodetic Coordinates 32.40043 Lat Deg 106.37033 Lon Deg
GEOMETRIC PRESSURE ALTITUDE MSL FEET MILLIBARS	PRESSURE MILLIBARS	90	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	REL.HUM. DENSITY SPEED OF PERCENT GM/CUBIC SOUND METER KNOIS	SPEEU OF SOUND KNOIS	WIND DATA DIRECTION S.EED DEGREES(IN) KNOTS	TA S.EED KNOTS	INUEX OF REFRACTION
23500.0 24000.0 24500.0 25000.0	426.4 417.9 409.6 401.4	-14.5 -15.8 -17.1 -18.5	-27.7 31.4 -28.8 31.6 -29.9 31.8 -31.0 32.0	31.6 31.6 32.0	573.9 565.4 557.1 548.9	573.9 626.8 565.4 625.1 557.1 623.5 548.9 621.9	46•1	16.6	1.000131 1.000129 1.000127 1.000125

			Œ	MANDATORY LEVELS	EVELS		
STATION ALTITUDE 398	JE 3989.00 FEET MSL	ET MSL		1870020434	*		GEODETIC COORDINATES
6 JULY 81	1 45 HRS	. x 4		WHITE SANG	SC		32,40043 LAT DEG
ASCENSION NO.	キロキ			•			106.37033 LON DEG
			11	TABLE 9			
	PRESSURE	PRESSURE GEOPOTENTIAL		TEMPERATURE	KEL.HUM.	WIND DATA	AIA
			AIR	AIR DEWPOINT	PERCENT	DIRECTION	SPEED
	MILLIBARS	FEET	DEGREES C	ENTIGRADE		DEGREES (TN)	KNOTS
	850.0		29.1	11.2	33.	175.2	2.5
	0.008		23.7	8.7	38.	174.0	
	750.0	8567	18.1	2.6	- - -	234.0	9
	1000	•	13.9	3.7	50.		
	650.0	12526.	8.7	•	55.		7.6
	0.009		3.1		79.		14.2
	550.0		-2.9	6.4-	86.	36.5	23.8
	200.0	19440.	-5.4	-19.1	33.		19.1
	450.0		-11.2	-24.7	31.		6.71
	0.004		-18.7	-31.2	, CE		

